

# Receiving Report

Date: 14/2/27 Batch No: M28 304  
 Supplier: me/pur solution Dart P/O: 2 3/15

Packing Slip: Yes ☒ No ☐  
 Invoice: Yes ☐ No ☒  
 Receipt: Cash ☐ Cr ☒  
 New Supplier Yes ☐ No ☒

Release Note Attached: Yes ☒ No ☒ N/A ☐  
 Waybill Attached: Yes ☐ No ☒ N/A ☐  
 Shipment Complete: DA Yes ☒ No ☐ N/A ☐  
 QC18 Inspection 27 9-89 14/3/6 N/A ☒  
 Work Order 4

## Discrepancies

Part Number	Description	Quantity Ordered	Quantity Rec'd	Quantity Short	Quantity Inspected	Quantity Rejected	Comment / NCR Number

Initials of Receiver

QC12

Production/Admin: 14/2/27  
 Date    
 Received/Costing    
 Initial  

Location



# Purchase Order Receipt Listing

Thursday, February 27, 2014 1:33:02 PM

All amounts are calculated in domestic currency.

All Vendors PO ID PO23115 Receipt Dates from 2/27/2014 to 2/27/2014 All Line Item Types  
All Item ID/GL/WOs All Rec. Employees All Currencies  
Grouped by Vendor ID

Purchase Order ID/ Curr Type	Line Nbr/ Insp Req	Project ID	Reference/ Description/ Cert Std	PO U/M/ Stock U/M	Required Date	Receiv Date/ Receiv Emp	Receiv Qty (PO U/M)	Cost Per Unit/ Receiv Value	Inspected Qty/ Rejected Qty (PO U/M)	MIRB Qty/ MIRB Reject Qty	Book Amt
Vendor ID: PO23115 CAD	1	No	VC-MET002 71401-45	Metaux Solutions Each	2/28/2014 1.0000	2/27/2014 DESI02	1.0000	\$0.00 \$0.00	0.0000 0.0000	0 0	\$0.00
	2	No	M4130NIB0.500X03. 000 4130 Bar 0.500 x 3.00 m128354	f	2/28/2014 48.0000	2/27/2014 DESI02	48.0000	\$27.63 \$1,326.33	0.0000 0.0000	0 0	\$1,326.33
	3	No	M2024T3S.040 2024-T3 .040 sheet m128354	sf	2/28/2014 192.0000	2/27/2014 DESI02	192.0000	\$6.29 \$1,207.02	0.0000 0.0000	0 0	\$1,207.02
	4	No	M2024T3S.050 2024-T3 .050 sheet m128354	sf	2/28/2014 48.0000	2/27/2014 DESI02	48.0000	\$7.70 \$369.77	0.0000 0.0000	0 0	\$369.77
	5	No	M2024T3S.063 2024-T3 .063 sheet m128354	sf	2/28/2014 192.0000	2/27/2014 DESI02	192.0000	\$9.53 \$1,829.55	0.0000 0.0000	0 0	\$1,829.55

Total Received Quantity: 481.0000  
Total Qty to Inspect (PO U/M): 0.0000  
Total Reject Quantity: 0.0000  
Total Receipt Value: \$4,732.67  
Total Balance Due Quantity: 0.0000



## Shipping Order

26/02/2014

METAUX SOLUTIONS INC  
2625 BOUL JACQUES CARTIER EST  
LONGUEUIL, QUEBEC  
J4N 1L7  
Tel.: 450 641-3330

Customer: 6323336

DART AEROSPACE LTD  
1270, ABERDEEN STREET  
HAWKESBURY, ONTARIO  
K6A 1K7

Order  
Reference  
Bid  
Ship

: 94598

: 23115

: 9250

: PICK UP / PICK UP

Ship To

Same

Tel.: 1 613 632-3336

Item No.	Description	Qty	Qty. Deliver	B/O Qty
MP124130N	4130 NORM PLATE .500 THICK AMS 6345 4 X 3" X 144"	12	12	0
AS04024	HT 1318 ALU SHE .040 2024-T3 4 X 4' X 12'	4	4 SHAW	0
AS05024	HT:668224A9 ALU SHEET .050 2024 T-3 1 X 4' X 12'	1	1 ✓	0
AS06324	HT:605877A0 2024-T3 ALU SHEET .063 4 X 4' X 12'	4	4 ✓	0
	HT:660298A1			

SHIP TST COLLECT  
JP

*Py/2/27*

Shipping : \_\_\_\_\_

Package No : \_\_\_\_\_

Merchandise Received: \_\_\_\_\_

Ref. : \_\_\_\_\_



SHIP TO:

**KAISER  
ALUMINUM**Trentwood Works - Spokane, WA 99215  
Phone: (800) 367-2586**CERTIFIED TEST REPORT**Serial Number  
4316218

SOLD TO:

CUSTOMER PO NUMBER: C67519		WORK PACKAGE:	CUSTOMER PART NUMBER:		SHIP RUN/LOAD: 102791/11	GOV'T CONTRACT NUMBER:	
KAISER ORDER NO: 1161137	LINE ITEM: 5	SHIP DATE: 22-NOV-2013	ALLOY: 2024	CLAD: BARE	TEMPER: T3	PRODUCT DESCRIPTION: HT Flat Sheet	
WEIGHT SHIPPED: 6618 LB	QUANTITY: 148 PCS EST.	TRUCK B/L #: 2045099	GAUGE: 0.0630 IN (1.6002 MM)		DIAMETER/WIDTH: 48.000 IN (1219.2 MM)	LENGTH: 144.000 IN (3657.6 MM)	

MHU 1732201: LOT 660298A1: 51 pieces; 187426  
 MHU 1732204: LOT 660298A1: 97 pieces; 27

DAS  
27  
9-28  
14/3/16

**Certified Specifications**AMS 4037/RevP  
CMMP-019/RevDAMS-QQ-A-250/4/RevA  
CMMP 025/RevU

ASTM B 209/Rev10

Test Code: 1504

**Test Results**Lot: 660298A1

Cast 645

Drop 05

Ingot 1

Melted in USA

(ASTM E8/B557)  
(EN 2002-1)

Tensile:	Temper	Dir / # Tests	Ultimate KSI (MPA)	Yield KSI (MPA)	Elongation %
	T3	LT / 2 (Min:Max)	66.5 : 67.1 (459 : 463)	44.6 : 45.1 (308 : 311)	19.1 : 21.5

(ASTM E1251)

Chemistry:	SI	FE	CU	MN	MG	CR	ZN	TI	V	ZR	OTHER
Actual(wt%)	0.08	0.21	4.6	0.56	1.4	0.01	0.14	0.02	0.01	0.00	TOT 0.03

**ALLOY LIMITS**

	SI	FE	CU	MN	MG	CR	ZN	TI	V	ZR	OTHER	MAX
2024												
MIN(wt%)	0.00	0.00	3.8	0.30	1.2	0.00	0.00	0.00	0.00	0.00	EACH	0.05
MAX(wt%)	0.50	0.50	4.9	0.9	1.8	0.10	0.25	0.15	0.05	0.05	TOT	0.15

Aluminum Remainder



## MATERIAL RECEIPT INSPECTION FORM

MATERIAL: m4130NB0.500x 03.000 <sup>m128354</sup>

PO / BATCH NO.: 23115

DATE: Feb, 27 / 2014

MATERIAL CERT REC'D: Yes Feb, 27 / 2014

THICKNESS ORDERED: .500

QUANTITY RECEIVED: 4 PCS

THICKNESS RECEIVED: .500

QUANTITY INSPECTED: 4

SHEET SIZE ORDERED: 4 x 3"

QUANTITY REJECTED: 0

SHEET SIZE RECEIVED: 4 x 3"

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y <input checked="" type="radio"/> N	
CORRECT FINISH	Y <input checked="" type="radio"/> N	
CORROSION	Y <input checked="" type="radio"/> N	
CORRECT GRAIN DIRECTION	Y <input checked="" type="radio"/> N	
CORRECT MATERIAL	Y <input checked="" type="radio"/> N	
CORRECT THICKNESS	Y <input checked="" type="radio"/> N	
PHOTO REQUIRED	Y <input checked="" type="radio"/> N	
CORRECT MATERIAL	<input checked="" type="radio"/> Y <input checked="" type="radio"/> N	ASTM A8/B557
CORRECT REF # TO LINK CERT	<input checked="" type="radio"/> Y <input checked="" type="radio"/> N	605977A8
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="radio"/> Y <input checked="" type="radio"/> N	m4130NB0.500x 03.000
CORRECT M# ON THE MATERIAL	<input checked="" type="radio"/> Y <input checked="" type="radio"/> N	m128354
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y <input checked="" type="radio"/> N	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y <input checked="" type="radio"/> N	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
TYPE OF MATERIAL SIZE OF TEST SAMPLE HARDNESS / DUROMETER READING	HRC	HRB	DUR A	DUR D	5 14/3/04
	30HRC				

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>DAS 27 9-89</u>	SIGNED OFF BY: _____
DATE: <u>14/3/14</u>	DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in



SHIP TO:

**KAISER  
ALUMINUM**Trentwood Works - Spokane, WA 99215  
Phone: (800) 367-2586

SOLD TO:

**CERTIFIED TEST REPORT**Serial Number  
4274651

CUSTOMER PO NUMBER: C65290 SEPT		WORK PACKAGE:	CUSTOMER PART NUMBER:		SHIP RUN/LOAD: 102414/11	GOV'T CONTRACT NUMBER:	
KAISER ORDER NO: 1136621	LINE ITEM: 4	SHIP DATE: 5-SEP-2012	ALLOY: 2024	CLAD: ALCLAD	TEMPER: T3	PRODUCT DESCRIPTION: HT Flat Sheet	
WEIGHT SHIPPED: 6580 LB	QUANTITY: 187 PCS EST.	TRUCK B/L #: 2038664	GAUGE: 0.0500 IN ( 1.2700 MM)		DIAMETER/WIDTH: 48.000 IN (1219.2 MM)	LENGTH: 144.000 IN (3657.6 MM)	

MHU 1617564: LOT 605877A0: 92 pieces LOT 605977A8: 17 pieces;  
 MHU 1617566: LOT 605977A8: 78 pieces;

D206081 - D206080

**Certified Specifications**AMS 4041/RevQ  
CMMP 019/RevDAMS-QQ-A-250/5/RevA  
CMMP 025/RevU

ASTM B 209/Rev10

Test Code: 1505

**Test Results**

Lot: 605877A0 Cast 583

Drop 12

Ingot 4

Melted in USA

(ASTM E8/B557)  
(EN 2002-1)

Tensile:	Temper	Dir / # Tests	Ultimate KSI (MPA)	Yield KSI (MPA)	Elongation %
	T3	LT / 2 (Min:Max)	60.1 : 61.4 (414 : 423)	40.0 : 41.8 (276 : 288)	17.5 : 21.2

(ASTM E1251)

Chemistry:	SI	FE	CU	MN	MG	CR	ZN	TI	V	ZR	OTHER
Actual(wt%)	0.08	0.21	4.5	0.58	1.3	0.01	0.14	0.02	0.01	0.00	TOT 0.03



# KAISER ALUMINUM

Trentwood Works - Spokane, WA 99215  
Phone: (800) 367-2586

## CERTIFIED TEST REPORT

Serial Number  
4274651

Lot: 605977A8 Cast 583 Drop 08 Ingot 3 Melted in USA

(ASTM E8/B557)  
(EN 2002-1)

Tensile:	Temper	Dir / # Tests	Ultimate KSI (MPA)	Yield KSI (MPA)	Elongation %
	T3	LT / 2 (Min:Max)	60.4 : 60.5 (416 : 417)	40.1 : 40.8 (276 : 281)	19.0 : 19.6

(ASTM E1251)

Chemistry:	SI	FE	CU	MN	MG	CR	ZN	TI	V	ZR	OTHER
Actual(wt%)	0.07	0.20	4.6	0.57	1.3	0.01	0.14	0.02	0.01	0.00	TOT 0.03

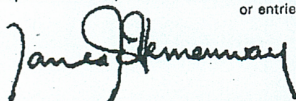
### ALLOY LIMITS

	SI	FE	CU	MN	MG	CR	ZN	TI	V	ZR	OTHER	MAX
2024												
MIN(wt%)	0.00	0.00	3.8	0.30	1.2	0.00	0.00	0.00	0.00	0.00	EACH	0.05
MAX(wt%)	0.50	0.50	4.9	0.9	1.8	0.10	0.25	0.15	0.05	0.05	TOT	0.15
Liner Alloy:	1230											
MIN(wt%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	EACH	0.03
MAX(wt%)	0.25	0.30	0.10	0.05	0.05	0.03	0.05	0.03	0.03	0.03	TOT	0.00

Aluminum Remainder

### CERTIFICATION

Kaiser Aluminum Fabricated Products, LLC (Kaiser) hereby certifies that metal shipped under this order was melted in the United States of America or a qualifying country per DFARS 225.872-1(a), was manufactured in the United States of America, and meets the requirements of DFARS 252.225 for domestic content. This material has been inspected, tested and found in conformance with the requirements of the applicable specifications as indicated herein. For material thicknesses outside specification limits, mechanical properties are as shown herein and chemical composition meets specification requirements. All metal which is solution heat treated complies with AMS 2772. Any warranty is limited to that shown on Kaiser's standard general terms and conditions of sale. Test reports are on file, subject to examination. Test reports shall not be reproduced except in full, without the written approval of Kaiser Aluminum Fabricated Products, LLC laboratory. The recording of false, fictitious or fraudulent statements or entries on the certificate may be punished as a felony under federal law. ISO-9001:2000 certified.



JAMES HEMMENWAY, LABORATORIES SUPERVISOR



## MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M2024T35 050 m128354 PO / BATCH NO.: 23115

DATE: Feb 27, 2014

MATERIAL CERT REC'D: Yes Feb 27, 2014

QUANTITY RECEIVED: 1 pcs

QUANTITY INSPECTED: 1

QUANTITY REJECTED: 0

THICKNESS ORDERED: 0.50

THICKNESS RECEIVED: 0.49

SHEET SIZE ORDERED: 44x12

SHEET SIZE RECEIVED: 44x12

DESCRIPTION	NCR (Check Y/N)		COMMENTS
SURFACE DAMAGE	Y	<input checked="" type="checkbox"/> N	
CORRECT FINISH	Y	<input checked="" type="checkbox"/> N	
CORROSION	Y	<input checked="" type="checkbox"/> N	
CORRECT GRAIN DIRECTION	Y	<input checked="" type="checkbox"/> N	
CORRECT MATERIAL	Y	<input checked="" type="checkbox"/> N	
CORRECT THICKNESS	Y	<input checked="" type="checkbox"/> N	
PHOTO REQUIRED	Y	<input checked="" type="checkbox"/> N	
CORRECT MATERIAL	<input checked="" type="checkbox"/> Y	N	AMS-99-A-280/S Rv A
CORRECT REF # TO LINK CERT	<input checked="" type="checkbox"/> Y	N	605877A0
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="checkbox"/> Y	N	m2024T35-050
CORRECT M# ON THE MATERIAL	<input checked="" type="checkbox"/> Y	N	m128354
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y	<input checked="" type="checkbox"/> N	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y	<input checked="" type="checkbox"/> N	

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
TYPE OF MATERIAL	HRC	HRB	DUR A	DUR D	8 14/03/06
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING		50 HRB			

testers located in the Quality Office

<b>QC 18 INSPECTION</b>	<b>ENGINEERING SIGNOFF (if required)</b>
INSPECTED BY: <u>MS 27 9-89</u>	SIGNED OFF BY: _____
DATE: <u>14/3/14</u>	DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in



SHIP TO:
SOLD TO:

**KAISER  
ALUMINUM**  
Trentwood Works - Spokane, WA 99215  
Phone: (800) 367-2586

## CERTIFIED TEST REPORT

Serial Number  
4320441

CUSTOMER PO NUMBER: C87751	WORK PACKAGE:	CUSTOMER PART NUMBER:	SHIP RUN/LOAD: 102820/21	GOV'T CONTRACT NUMBER:
KAISER ORDER NO: 1163629	LINE ITEM: 4	SHIP DATE: 7-JAN-2014	ALLOY: 2024	CLAD: BARE
TEMPER: T3	PRODUCT DESCRIPTION: HT Flat Sheet			
WEIGHT SHIPPED: 6552 LB	QUANTITY: 233 PCS EST.	TRUCK B/L #: 2045786	GAUGE: 0.0400 IN (1.0160 MM)	DIAMETER/WIDTH: 48.000 IN (1219.2 MM)
			LENGTH: 144.000 IN (3657.6 MM)	

MHU 1744754: LOT 668224A9: 20 pieces; 0272828  
 MHU 1746026: LOT 669415A2: 153 pieces; 28  
 MHU 1746100: LOT 669415A2: 60 pieces; 30

### Certified Specifications

AMS 4037/RevP  
CMMP 019/RevD

AMS-QQ-A-250/4/RevA  
CMMP 025/RevU

ASTM B 209/Rev10

Test Code: 1504

### Test Results

Lot: 668224A9 Cast 656

Drop 10

Ingot 3

Melted in USA

(ASTM E8/B557)  
(EN 2002-1)

Tensile: Temper  
T3

Dir / # Tests  
LT / 2 (Min:Max)

Ultimate KSI (MPA)  
65.4 : 65.7  
(451 : 453)

Yield KSI (MPA)  
44.3 : 44.5  
(305 : 307)

Elongation %  
17.0 : 17.2

(ASTM E1251)

Chemistry:

Actual(wt%)

SI	FE	CU	MN	MG	CR	ZN	TI	V	ZR	OTHER
0.10	0.24	4.4	0.55	1.3	0.01	0.14	0.02	0.01	0.00	TOT 0.03





# KAISER ALUMINUM

Trentwood Works - Spokane, WA 99215  
Phone: (800) 367-2586

## CERTIFIED TEST REPORT

Serial Number  
4320441

Lot: 669415A2 Cast 653 Drop 91 Ingot 2 Melted in USA

(ASTM E8/B557)  
(EN 2002-1)

Tensile:	Temper	Dir / # Tests	Ultimate KSI (MPA)	Yield KSI (MPA)	Elongation %
	T3	LT / 2 (Min:Max)	68.2 : 68.9 (470 : 475)	46.5 : 46.5 (321 : 321)	15.8 : 16.6

(ASTM E1251)

Chemistry:	SI	FE	CU	MN	MG	CR	ZN	TI	V	ZR	OTHER
Actual(wt%)	0.08	0.15	4.8	0.59	1.4	0.01	0.08	0.01	0.01	0.00	TOT 0.03

### ALLOY LIMITS

	SI	FE	CU	MN	MG	CR	ZN	TI	V	ZR	OTHER	MAX
2024												
MIN(wt%)	0.00	0.00	3.8	0.30	1.2	0.00	0.00	0.00	0.00	0.00	EACH	0.05
MAX(wt%)	0.50	0.50	4.9	0.9	1.8	0.10	0.25	0.15	0.05	0.05	TOT	0.15

Aluminum Remainder

### CERTIFICATION

Kaiser Aluminum Fabricated Products, LLC (Kaiser), is ISO-9001:2008/AS9100C certified and hereby certifies that all material shipped under this order:

- has been inspected, tested, and found to be in conformance with the requirements of the specifications indicated herein. For material thicknesses outside specification limits, mechanical properties are as shown herein and chemical composition meets specification requirements.
- was melted in the United States of America or a qualifying country per DFARS 226.872-1(a), was manufactured in the United States of America, and meets the requirements of DFARS 252.226 for domestic content.
- has been thermally processed in compliance with AMS 2772, where applicable.
- is mercury free, within the limits of detection of ASTM E1251 (< = 1ppm).
- is in compliance with RoHS 2, European Union Directive 2011/65/EU.
- is in compliance with and regularly monitors any updates to the European Chemical Agency, ECHA, REACH regulations, (EC) n°1907/2006.
- is free of Conflict Minerals, as defined in Section 15.2 of the Dodd-Frank Act.

Any warranty is limited to that shown on Kaiser Aluminum's standard general terms and conditions of sale. Test reports are on file, subject to examination. Test reports shall not be reproduced except in full, without the written approval of the Kaiser Aluminum laboratory. The recording of false, fictitious or fraudulent statements or entries on the certificate may be punished as a felony under federal law.

*James Hemmenway*

JAMES HEMMENWAY, LABORATORIES SUPERVISOR



Page 2 of 2



## MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M2024T35. 040 M128354 PO / BATCH NO.: 23115

DATE: Feb. 27, 2014

MATERIAL CERT REC'D: Yes Feb 27, 2014

QUANTITY RECEIVED: 4 pss

QUANTITY INSPECTED: 4

QUANTITY REJECTED: X

THICKNESS ORDERED: 0.40

THICKNESS RECEIVED: 0.40

SHEET SIZE ORDERED: 44x12

SHEET SIZE RECEIVED: 44x12

DESCRIPTION	NCR (Check Y/N)		COMMENTS
SURFACE DAMAGE	Y	<u>(N)</u>	
CORRECT FINISH	Y	<u>(N)</u>	
CORROSION	Y	<u>(N)</u>	
CORRECT GRAIN DIRECTION	Y	<u>(N)</u>	
CORRECT MATERIAL	Y	<u>(N)</u>	
CORRECT THICKNESS	Y	<u>(N)</u>	
PHOTO REQUIRED	Y	<u>(N)</u>	
CORRECT MATERIAL	<u>(Y)</u>	N	<u>AMS 599-A-25</u>
CORRECT REF # TO LINK CERT	<u>(Y)</u>	N	<u>16822419</u>
CORRECT MATERIAL IDENTIFICATION	<u>(Y)</u>	N	<u>M2024T35-040</u>
CORRECT M# ON THE MATERIAL	<u>(Y)</u>	N	<u>M128354</u>
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y	<u>(N)</u>	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y	<u>(N)</u>	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
TYPE OF MATERIAL	HRC	HRB	DUR A	DUR D	
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING		<u>50 HRC</u>			<u>5</u> <u>14/03/06</u>

testers located in the Quality Office

<b>QC 18 INSPECTION</b> INSPECTED BY: <u>DAS 27 9-89</u> DATE: <u>14/3/14</u>	<b>ENGINEERING SIGNOFF (if required)</b> SIGNED OFF BY: _____ DATE: _____
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Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in



## TEST CERTIFICATE

SHIP TO: ARCELORMITTAL PLATE LLC  
LLC

PAGE NO: 01 OF 02  
FILE NO: 2765-01-01  
MILL ORDER NO: 79967-002  
MELT NO: C1318  
DATE: 07/25/12

SOLD TO:

SEND TO:

01-C

## PLATE DIMENSIONS / DESCRIPTION

TOTAL QTY	GAUGE	WIDTH	LENGTH	DESCRIPTION	PIECE WEIGHT
7	.5"	72.5"	144.5"	RECTANGLE	1486#

## CUSTOMER INFORMATION

CUSTOMER PO: 011212MC

## SPECIFICATION(S)

THIS MATERIAL HAS BEEN MANUFACTURED AND TESTED IN ACCORDANCE WITH PURCHASE ORDER REQUIREMENTS AND SPECIFICATION(S).

AMS 6345C YR 11 AIRCRAFT

UNS

AIRCRAFT QUALITY ASTM A829 06 GRADE 4130 &amp; AISI

4130 97

THE MANAGEMENT SYSTEMS FOR MANUFACTURE OF THIS PRODUCT ARE CERTIFIED TO ISO 9001:2008 (CERTIFICATE NO. 30130) AND ISO 14001 (CERTIFICATE NO. 009496).

## CHEMICAL COMPOSITION

	C	MN	P	S	CU	SI	NI	CR	MO
MELT: C1318	.31	.50	.014	.002	.12	.24	.11	.90	.21
PROD ANALYSIS	.32	.52	.015	.002	.12	.25	.11	.90	.20
	V	AL	CB						
MELT: C1318	.057	.012	.001						
PROD ANALYSIS	.059	.017	.001						

## MANUFACTURE

ELECTRIC FURNACE QUALITY - FINELINE - VACUUM DEGASSED - FINE GRAIN PRACTICE - MCQUAID-EHN GRAIN SIZE PER E112 - 7-8

## HEAT TREAT CONDITION

MATL OR TEST	HEAT TREAT DESCRIPTION	NOM TEMP	HOLD MINS	COOL MTHD
PL/TEST	NORMALIZE	1660F	28	AIR COOL

WE HEREBY CERTIFY THE ABOVE INFORMATION IS CORRECT:

ARCELORMITTAL PLATE LLC  
QUALITY ASSURANCE LABORATORY  
139 MODENA ROAD  
COATESVILLE, PA 19320

*Elinore Zaplitny*  
SUPERVISOR - TEST REPORTING  
ELINORE ZAPLITNY



# TEST CERTIFICATE

PAGE NO: 02 OF 02  
 FILE NO: 2765-01-01  
 MILL ORDER NO: 79967-002  
 MELT NO: C1318  
 DATE: 07/25/12

## MECHANICAL PROPERTIES

BEND TEST - BOT./TRANS. - PASS

BEND TEST - TOP/LONG. - PASS

## TENSILE PROPERTIES

LOC	DIR	YIELD STRENGTH PSI X 100	TENSILE STRENGTH PSI X 100	ELONGATION GAGE LGTH	%
BOT.	TRANS.	719	1175	2.00"	16.0
BOT.	TRANS.	772	1195	2.00"	20.0
TOP	TRANS.	727	1189	2.00"	17.0
TOP	TRANS.	809	1210	2.00"	20.0

## DECARB TESTING

LOC	DEPTH	SURFACE	SUBSURFACE
BOT.	.012	0	0
BOT.	.009	0	0
TOP	.008	0	0
TOP	.012	0	0

## OTHER METALLURGICAL AND MICROSTRUCTURAL TESTS

MAGNETIC PARTICLE - FREQUENCY .00001 - SEVERITY .00001

## GENERAL INFORMATION

ALL STEEL HAS BEEN MELTED AND MANUFACTURED IN THE U.S.A.  
 MATERIAL HAS BEEN VACUUM DEGASSED AND CALCIUM TREATED  
 FOR SULFIDE SHAPE CONTROL.  
 MAG. PART. FREQ. AND SEVERITY RATING PER AMS-2301K.  
 ACID SOLUBLE ALUMINUM  
 FOR MORE INFORMATION AND PROCESSING GUIDELINES, REFER TO  
 WWW.ARCELORMITTAL.COM/PLATEINFORMATION

REDUCTION RATIO - 1B

B/L #00104 MAVERICK TRANSPORTATION

WE HEREBY CERTIFY THE ABOVE  
 INFORMATION IS CORRECT:

ARCELORMITTAL PLATE LLC  
 QUALITY ASSURANCE LABORATORY  
 139 MODENA ROAD  
 COATESVILLE, PA 19320

*Elinore Zaplitny*  
 SUPERVISOR - TEST REPORTING  
 ELINORE ZAPLITNY



## MATERIAL RECEIPT INSPECTION FORM

MATERIAL: m2024T35 063 m128354 PO / BATCH NO.: 23115  
 DATE: Feb 27, 2014

MATERIAL CERT REC'D: Yes Feb 27, 2014 THICKNESS ORDERED: 0.62  
 QUANTITY RECEIVED: 4 pcs THICKNESS RECEIVED: 0.63  
 QUANTITY INSPECTED: 4 SHEET SIZE ORDERED: 484x12  
 QUANTITY REJECTED: 0 SHEET SIZE RECEIVED: 484x12

DESCRIPTION	NCR (Check Y/N)		COMMENTS
SURFACE DAMAGE	Y	<input checked="" type="checkbox"/> N	
CORRECT FINISH	Y	<input checked="" type="checkbox"/> N	
CORROSION	Y	<input checked="" type="checkbox"/> N	
CORRECT GRAIN DIRECTION	Y	<input checked="" type="checkbox"/> N	
CORRECT MATERIAL	Y	<input checked="" type="checkbox"/> N	
CORRECT THICKNESS	Y	<input checked="" type="checkbox"/> N	
PHOTO REQUIRED	Y	<input checked="" type="checkbox"/> N	
CORRECT MATERIAL	<input checked="" type="checkbox"/> Y	N	AMS 60A-250/4 Rev A
CORRECT REF # TO LINK CERT	<input checked="" type="checkbox"/> Y	N	(60298A)
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="checkbox"/> Y	N	m2024T35.063
CORRECT M# ON THE MATERIAL	<input checked="" type="checkbox"/> Y	N	m128354
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y	<input checked="" type="checkbox"/> N	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y	<input checked="" type="checkbox"/> N	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
TYPE OF MATERIAL	HRC	HRB	DUR A	DUR D	
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING		60HRC			5 14.6/14

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>DAS 27 9-05</u> DATE: <u>14/3/14</u>	SIGNED OFF BY: _____ DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in





Dart Aerospace Ltd.  
1270 Aberdeen Street  
Hawkesbury, ON K6A 1K7  
Tel: 613 632 9577  
Fax: 613 632 1053

## PURCHASE ORDER

Purchase Order ID PO23115

Purchase Order Date 2/24/2014

PO Print Date 2/24/2014

Page Number 1 of 3

**Order From :**

VC-MET002

**Ship To :** DART AEROSPACE LTD

1270 ABERDEEN  
HAWKESBURY, ON K6A 1K7  
CANADA

METAUX SOLUTIONS  
2625 BOUL JACQUES-CARTIER EST  
LONGUEUIL, QC J4N 1L7  
CA

**FAKED**  
2/17/2014

**Contact Name**

**Vendor Phone** 800 558 8858

**Ship To Contact**

**Ship To Phone**

**Ship Via:** TST ground

**Ship Acct:**

**Buyer**

Chantal Lavoie

**Customer POID**

**Customer Tax #** 10127-2607

**Terms**

Net 30

**Currency**

CAD

**FOB**

Destination-Collect

Line Nbr	Reference Vendor Part Number	Description/ Mfg ID	Req Date/ Taxable	CD	Req Qty/ Unit of Measure	PO Unit Price	Extended Price
	Line Comments		Promise Date				
	Delivery Comments						
1	71401-45		2/28/2014		1.00	\$0.00	\$0.00
			No		Each		
	Procurement Quality Clauses		2/28/2014				
	A005 right of entry						
	A012 chemical and physical test report						
	A016 personnel qualification						
	A017 raw material identification (as applicable)						
	A026 certification of material conformance						
	A041 quality management system						
						<b>Line Total:</b>	<b>\$0.00</b>
2	M4130NB0.500X03.000	4130 Bar 0.500 x 3.00	2/28/2014		48.00	\$30.75	\$1,476.00
			Yes		f		
			2/28/2014				
	MATERIAL: AISI 4130N STEEL BAR PER MIL-S-6758 OR AMS 6345/6348/6370/6528						
						<b>Line Total:</b>	<b>\$1,476.00</b>

Note:

2/24/2014





Dart Aerospace Ltd.  
1270 Aberdeen Street  
Hawkesbury, ON K6A 1K7  
Tel: 613 632 9577  
Fax: 613 632 1053

## PURCHASE ORDER

Purchase Order ID PO23115

Purchase Order Date 2/24/2014

PO Print Date 2/24/2014

Page Number 2 of 3

**Order From :**

VC-MET002

**Ship To :** DART AEROSPACE LTD

METAUX SOLUTIONS  
2625 BOUL JACQUES-CARTIER EST  
LONGUEUIL, QC J4N 1L7  
CA

1270 ABERDEEN  
HAWKESBURY, ON K6A 1K7  
CANADA

**Contact Name**

**Vendor Phone**

800 558 8858

**Ship To Contact**

**Ship To Phone**

**Ship Via:**

TST ground

**Ship Acct:**

**Buyer**

Chantal Lavoie

**Customer POID**

**Customer Tax #**

10127-2607

**Terms**

Net 30

**Currency**

CAD

**FOB**

Destination-Collect

3	M2024T3S.040	2024-T3 .040 sheet	2/28/2014	192.00	✓	\$7.00	\$1,343.22
			Yes	sf			
			2/28/2014				

MATERIAL: 2024-T3 ALUMINUM SHEET  
AS PER QQ-A-250/4 OR AMS-QQ-A-250/4 OR AMS 4037  
OR ASTM B209

**Line Total:** \$1,343.22

4	M2024T3S.050	2024-T3 .050 sheet	2/28/2014	48.00	✓	\$8.57	\$411.50
			Yes	sf			
			2/28/2014				

MATERIAL: 2024-T3 ALUMINUM SHEET  
AS PER QQ-A-250/4 OR AMS-QQ-A-250/4 OR AMS 4037  
OR ASTM B209

**Line Total:** \$411.50

5	M2024T3S.063	2024-T3 .063 sheet	2/28/2014	192.00	✓	\$10.60	\$2,036.00
			Yes	sf			
			2/28/2014				

MATERIAL: 2024-T3 ALUMINUM SHEET  
AS PER QQ-A-250/4 OR AMS-QQ-A-250/4 OR AMS 4037  
OR ASTM B209

**Note:**

2/24/2014





Dart Aerospace Ltd.  
1270 Aberdeen Street  
Hawkesbury, ON K6A 1K7  
Tel: 613 632 9577  
Fax: 613 632 1053

## PURCHASE ORDER

Purchase Order ID **PO23115**

Purchase Order Date 2/24/2014

PO Print Date 2/24/2014

Page Number 3 of 3

**Order From :**

VC-MET002

**Ship To :** DART AEROSPACE LTD

1270 ABERDEEN  
HAWKESBURY, ON K6A 1K7  
CANADA

METAUX SOLUTIONS  
2625 BOUL JACQUES-CARTIER EST  
LONGUEUIL, QC J4N 1L7  
CA

**Contact Name**

**Vendor Phone** 800 558 8858

**Ship To Contact**

**Ship To Phone**

**Ship Via:** TST ground

**Ship Acct:**

**Buyer**

Chantal Lavoie

**Customer POID**

**Customer Tax #** 10127-2607

**Terms**

Net 30

**Currency**

CAD

**FOB**

Destination-Collect

**Line Total:** \$2,036.00

**PO Total:** \$5,266.72

**Note:** Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit [www.dartaerospace.com](http://www.dartaerospace.com) for further explanation.

**Change Nbr:** 1

**Change Date:** 2/24/2014